EVENT-DRIVEN FLOW CONTROL FOR A VERY HIGH-SPEED SWITCHING NODE

Abstract

A method for controlling the flows of data packets that are switched or routed at nodes of high-speed communication networks is disclosed. According to the invention, resource metering units are assigned to resources shared between devices of the switch or router e.g., shared memories or link bandwidths. When the occupancy of a shared resource reaches a predetermined threshold, an event is generated and transmitted to devices sharing this resource. Furthermore, a periodic refresh of the overall flow control information is performed so that lost events are, however, eventually acted on. Thus, a new device may become active without perturbing the active flows after having gathered enough flow control information.